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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,585

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Bernd Kusel

KUSEL-6 PCT

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EXAMINER

DEUBLE, MARK A

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,585	<b>Applicant(s)</b> KUSEL, BERND	
	<b>Examiner</b> MARK A. DEUBLE	<b>Art Unit</b> 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 8-9, state that the optoelectronic system “detects the carrying side and/or the running side, particularly the carrying side” of the belt which renders the scope of the claim impossible to ascertain because it is unclear whether the detecting of the carrying side is a required part of the device as suggested by the phrase “particularly” or an optional part of the device as suggested by the phrase “and/or.”

Claim 1, line 11-13, state that the optoelectronic system “triggers an acoustical and or optical alarm and/or, in particular, brings about an automatic shut-down of the system” which renders the scope of the claim impossible to ascertain because it is unclear whether the bringing about of the automatic shut-down is a required part of the device as suggested by the phrase “in particular” or an optional part of the device as suggested by the phrase “and/or.”

Claim 1 recites the limitation "the date" in line 16. There is insufficient antecedent basis for this limitation in the claim.

Claim 1, lines 18-21 recites the phrase “as well as other system parts, namely contact drums, support rollers, support scaffolding, as well as any other components that might be necessary.” This phrase renders the scope support claims impossible to ascertain because it is

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unclear if the contact drums, support rollers, and scaffolding are required parts of the invention and because it is unclear what other parts might be necessary parts of the device.

Claim 1 recites the limitation "the reference frequency" in line 24. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the reports" in line 27. There is insufficient antecedent basis for this limitation in the claim.

Claim 1, lines 26-27, state that a process computer evaluates the change in frequency "with simultaneous balancing" with reports from the optoelectronic system. It is unclear what "balancing" takes place in the process computer or what the word balancing means in the context of evaluating data.

Claim 1, lines 326-30, states that process computer brings about "an acoustical and or optical alarm and/or, in particular, brings about an automatic shut-down of the system" which renders the scope of the claim impossible to ascertain because it is unclear the bringing about of the automatic shut-down is a required part of the device as suggested by the phrase "in particular" or an optional part of the device as suggested by the phrase "and/or."

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2 and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Weber (DE 3611125 A1).

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Weber shows a device for monitoring a conveyor having a belt 7 made of elastomer material and having a carrying side for the goods to be conveyed and a running side supported by support rollers, contract drums and scaffolding, and an embedded strength support. An optoelectronic system 26 optically detects the running side of the belt to recognize damage during operation. If a critical state of the conveyor belt is reached an acoustical and/or optical alarm is triggered at alarm unit (display 29 or speaker 31) of a process computer unit 30 to which they are connected. The process computer is coupled with the optoelectronic system for the purpose of evaluating data from the optoelectronic system. The device is additionally equipped with at least one structure-borne noise sensor 23 disposed in the vicinity of the optoelectronic system that detects changes in the sound of the conveyor. These changes in sound may be considered to be deviations from a reference frequency in the absence of any language in the claim defining the reference frequency. The process computer is also connected with the structure-borne noise sensor to evaluates the change in frequency at the same time as it evaluates reports from the optoelectronic system, so that even in a case where the optoelectronic system itself does not report a critical state, an acoustical alarm, optical alarm, or automatic shut-down of the conveyor may be brought about. Thus Weber shows all the structure required by claims 1-2 and 8-9.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1-2 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schnell (WO 2005/023688 A1) in view of Hueser (DE 195 32 010 A1).

Schnell shows a device for monitoring a conveyor having a belt 1 made of elastomer material and having a carrying side for the goods to be conveyed and a running side supported by support rollers 2, contract drums and scaffolding, and an embedded strength support. An optoelectronic system 3 optically detects the carrying side of the belt to recognize damage during operation. If a critical state of the conveyor belt is reached an acoustical alarm, optical alarm 8, or stopping of the conveyor belt is triggered by a process computer unit 7 connected to the alarms. The process computer is coupled with the optoelectronic system for the purpose of evaluating data from the optoelectronic system. However, Schnell does not include the noise sensor required by claim 1.

Hueser shows a conveyor belt device of the type shown in Schnell that is equipped with at least one structure-borne noise sensor 22 that detects changes in the sound of the conveyor. These changes in sound may be considered to be deviations from a reference frequency in the absence of any language in the claim defining the reference frequency. A process computer 23 is also connected with the structure-borne noise sensor to evaluates the change in frequency at the same time as it evaluates reports from the optoelectronic system, so that even in a case where the optoelectronic system itself does not report a critical state, an acoustical alarm, optical alarm, or automatic shut-down of the conveyor may be brought about. Hueser teaches that the noise sensor provides another means of monitoring the damage in a conveyor belt. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to connect the sensor 22 to the process computer 7 of Schnell to provide a back up means of monitoring the

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conveyor belt. When this is done, the resulting device would have all the structure required by claims 1-2 and 8-9.

***Allowable Subject Matter***

7. Claims 3-7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK A. DEUBLE whose telephone number is (571)272-6912. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark A. Deuble/  
Primary Examiner  
Art Unit 3651

md